Claims

What is claimed is:

[c1]   A directory server system, comprising:

a front-end portion adapted to connect to a client computer;

a back-end portion with an embedded database; and

a mapping tree portion;

wherein the front-end portion comprises a core protocol connection responder configured to access information stored in the back-end portion, wherein the back-end portion is maintained in a logical representation by a directory information tree;

wherein the mapping tree portion identifies a location of information stored in the back-end portion in response to a request sent by the client computer.

[c2]   The system of claim 1, further comprising:

a graphical user interface backed by an administrative server configured to manage the directory server system.

[c3]   The system of claim 1, further comprising:

a gateway allowing access and querying of the back-end portion from a web browser.

[c4]   The system of claim 1, further comprising:

a plurality of database command line tools to manipulate the front-end portion and the back-end portion.

[c5]   The system of claim 1, further comprising:

a network management protocol monitor.

[c6]   The system of claim 1, wherein the front-end portion manages communication between server-side software and a directory client program stored on the client computer.

[c7]   The system of claim 1, wherein the front-end portion functions as a daemon.

[c8]   The system of claim 1, wherein the front-end portion functions as a service.

[c9]   The system of claim 1, wherein the back-end portion comprises a plurality of back-end plug-ins for database management.

[c10]   The system of claim 1, wherein the client computer is adapted to connect to the front-end portion using an encrypted connection.

[c11]   The system of claim 9, wherein the plurality of back-end plug-ins allow a directory administrator to manage and manipulate the information stored in the embedded database.

[c12]   A directory server system, comprising:

a front-end portion adapted to connect to a client computer;

a back-end portion with an embedded database;

a mapping tree portion;

a graphical user interface backed by an administrative server configured to manage the directory server system;

a gateway allowing access and querying of the back-end portion from a web browser;

a plurality of database command line tools to manipulate the front-end portion and the back-end portion; and

a network management protocol monitor;

wherein the front-end portion comprises a core protocol connection responder configured to access information stored in the back-end portion, wherein

the back-end portion is maintained in a logical representation by a directory information tree;

wherein the mapping tree portion identifies a location of information stored in the back-end portion in response to a request sent by the client computer.

[c13] A computer system to manage a directory server, comprising:

a processor;

a memory; and

software instructions stored in the memory for enabling the computer system under control of the processor, to perform:

receiving a Lightweight Directory Access Protocol request from a client computer to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end call;

sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result, wherein the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer;

passing the result to the front-end portion; and

sending the result from the front-end portion to the client computer.

[c14] A method of processing a Lightweight Directory Access Protocol request from a client computer using a directory server comprising:

sending a Lightweight Directory Access Protocol request from the client computer to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end call;

sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result,

wherein, the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer;

passing the result to the front-end portion; and

sending the result from the front-end portion to the client computer.

[c15] The method of claim 14, further comprising:

managing communication by the front-end portion between server-side software and a directory client program stored on the client computer.

[c16] The method of claim 14, further comprising:

managing the directory server system using a graphical user interface backed by an administrative server.

[c17] The method of claim 14, further comprising:

accessing and querying the back-end portion from a web browser with a gateway.

[c18] The method of claim 14, further comprising:

manipulating the front-end portion and the back-end portion with a plurality of database command line tools.

[c19] The method of claim 14, further comprising:

reporting activity to a network console workstation by a network management protocol monitor.

[c20] A method of processing a Lightweight Directory Access Protocol request from a client computer using a directory server comprising:

sending a Lightweight Directory Access Protocol request from the client computer
to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end
call;

sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result,
wherein, the default database function comprises a mapping tree portion to
identify a location of information stored in the back-end portion in response
to the Lightweight Directory Access Protocol request sent by the client
computer;

passing the result to the front-end portion;

sending the result from the front-end portion to the client computer;

managing communication by the front-end portion between server-side software
and a directory client program stored on the client computer;

managing the directory server using a graphical user interface backed by an
administrative server;

accessing and querying the back-end portion from a web browser with a gateway;

manipulating the front-end portion and the back-end portion with a plurality of
database command line tools; and

reporting activity to a network console workstation by a network management
protocol monitor.

[c21] An apparatus for processing a Lightweight Directory Access Protocol request from
a client computer using a directory server comprising:

means for sending a Lightweight Directory Access Protocol request from the
client computer to a front-end portion;

means for processing the Lightweight Directory Access Protocol request to create
a front-end call;

means for sending the front-end call to a back-end portion;

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means for processing the front-end call using a default database function to produce a result,

wherein, the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer;

means for passing the result to the front-end portion; and

means for sending the result from the front-end portion to the client computer.